

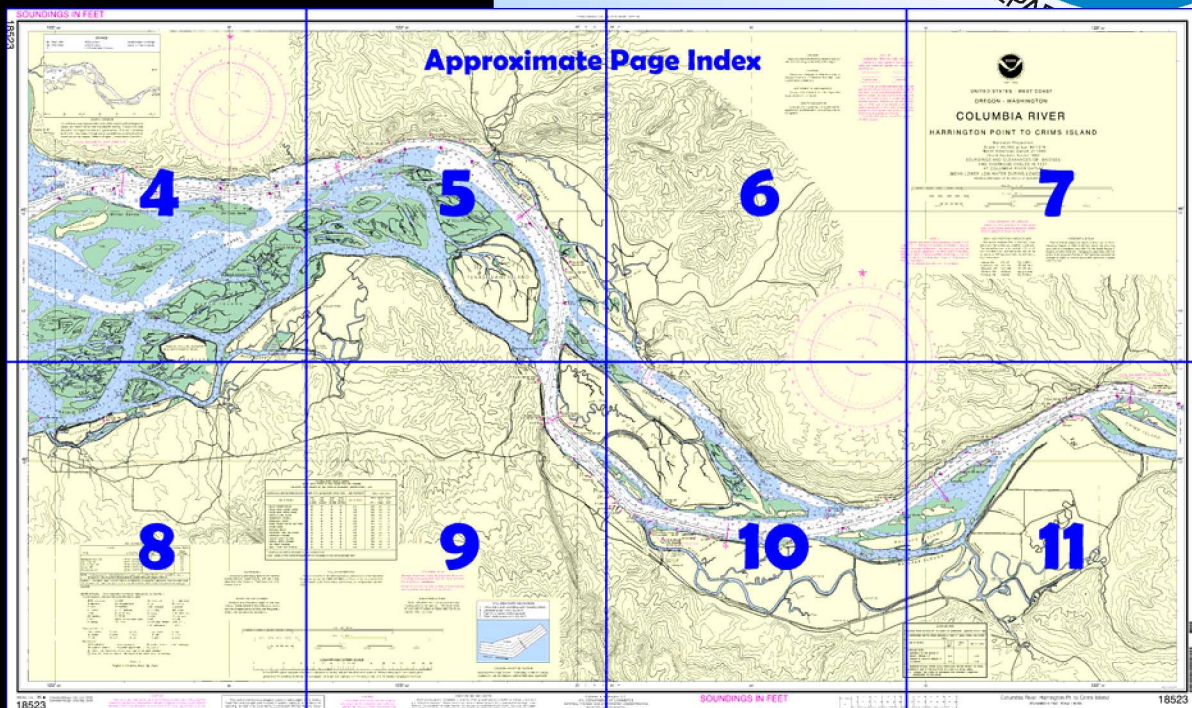
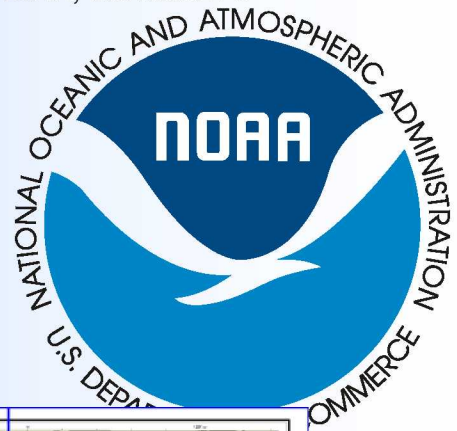
BookletChartTM

Columbia River – Harrington Point to Crims Island (NOAA Chart 18523)

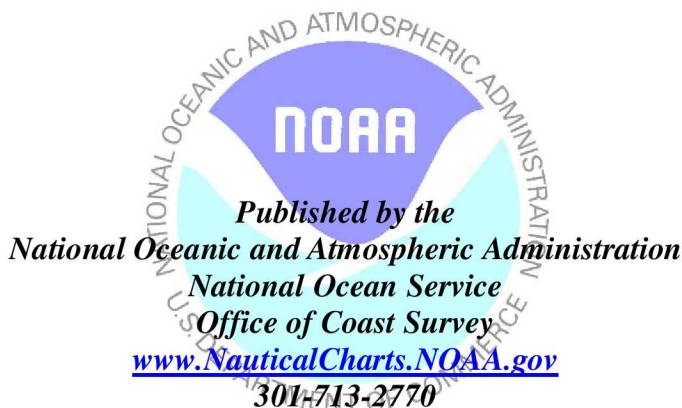


A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

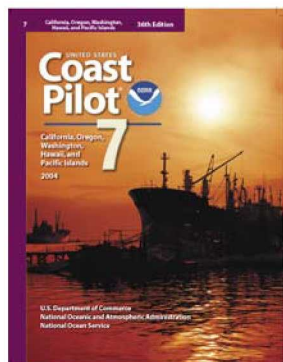
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 7, Chapter 10 excerpts]

(151) Between **Harrington Point**, Mile 20.5 (23.6), and **Crims Island**, Mile 47.5 (54.6), Columbia River main channel follows the N bank to **Three Tree Point**, thence swings around the bend, holding to the NE shore as far as **Hunting Islands**, where it swings along the S shore until off the SE end of **Puget Island**; thence it follows the N bank from **Cape Horn** past **Abernathy Point** and N of Crims Island and **Gull Island**.

(152) In this section the current velocity is about 1 knot. Because of the river flow, which combines with the current, the upstream flow is weak or nonexistent and the downstream flow attains velocities of 2 to 3 knots.

(153) Differences of as much as 3° from the normal variation have been observed along this section of the river.

(154) **Steamboat Slough**, NE of **Price Island** at Mile 29.3 (33.7) on the Washington side, and **Elochoman Slough**, on the E side of Hunting Islands at Mile 31.3 (36), are used by fishing boats, tugs, and for log storage. Gasoline and diesel fuel are available at **Skamokawa** just above the NW end of Steamboat Slough. A small marine railway, owned by a private packing firm, can be used if prior arrangements are made. In November 2000, the controlling depth was 1 foot along the SE edge of the entrance channel (shoaling to bare across the remainder of the entrance) and in the channel bend off Skamokawa.

(155) At Mile 35 (39.9), a power cable with a least clearance of 221 feet crosses the main channel to Puget Island. The tower on the E side of the channel on Puget Island is prominent.

(156) **Cathlamet Channel** joins the main channel at Mile 32.3 (37.2) on the Washington side. It is used by fishing boats, tugs, log rafts, and barges, and for some log storage above the city of **Cathlamet**.

(157) Three wharves, owned and operated by Fort James, are at **Wauna**, on the Oregon side at Mile 36.2

(158) **Westport Slough**, at Mile 37.4 (43) on the Oregon side, leads to a ferry dock at the village of **Westport**. A lumbermill wharf, in ruins, is just E of the ferry slip. In 1989, the midchannel depth was 13 feet to the ferry dock. The ferry operates between Westport and the ferry landing 0.5 mile N of **Pancake Point** on Puget Island, and carries passengers and automobiles. Above Westport the slough was used for log storage; decaying and submerged piling may present hazards to vessels operating close to shore. About 7 feet can be carried to **Kerry**, 2.4 miles above the mouth. Overhead power cables 0.8 and 1 mile above the mouth of the slough have clearances of 74 and 76 feet, respectively.

(159) **Wallace Slough**, at Mile 41 (47) S of Wallace Island, is used by fishing boats and house floats. A depth of 4 to 5 feet can be carried through the slough.

(160) **Beaver Slough** enters Wallace Slough near the SE end of Wallace Island. The slough is used by fishing boats and house floats. A fixed bridge with a 30-foot span and clearance of 8 feet crosses the W arm of the slough near its mouth. An overhead power cable with a clearance of 68 feet crosses the slough about 2 miles above the mouth.

(161) **Clatskanie River** is a tributary of Beaver Slough. A railroad swing bridge, about 0.6 mile above the mouth, has a clearance of 16 feet through the E draw. There is a wharf at Clatskanie. Gasoline, diesel fuel, and water are available in cans from the town; mariners supplies, ice, and a launching ramp are also available. Several sawmills once operated along the river. Logs were stored throughout the area, and remnants of piling and related structures may present hazards close to shore. In November 1998, depths of about 2 feet could be carried through Beaver Slough to the mouth of Clatskanie River; thence 2 feet could be carried in the river to the town of Clatskanie; local knowledge is advised. Numerous shoals and snags have been reported in Beaver Slough and Clatskanie River.

(162) **Port Westward**, a former Army ammunition terminal, is the site of a general cargo terminal. The main wharf, just W of the entrance to Bradbury Slough, is 1,200 feet long, has 40 feet reported alongside and a deck height of 20 feet, and can be used for shipment and receipt of general cargo.

(163) **Bradbury Slough**, at Mile 46.6 (53.6) SW of Crims Island, has depths of 9 feet as far as the upper end where it shoals to 3 feet. There once was extensive log storage along the Crims Island shore. Remnants of pilings and log storage related structures may present hazards close to shore.

Table of Selected Chart Notes

Corrected through NM Oct. 07/06
Corrected through LNM Sep. 26/06

HEIGHTS

Heights in feet above Mean High Water.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

LOCAL MAGNETIC DISTURBANCE

Differences of as much as 3° from the normal variation have been observed along the section of the Columbia River shown on this chart

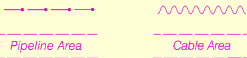
AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers and U.S. Coast Guard.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Astoria, WA	KEC-91	162.40 MHz
Neahkahnie, OR	WWF-94	162.425 MHz
Tillamook, OR	WWF-95	162.475 MHz
Olympia, WA	WXM-62	162.475 MHz
Portland, OR	KIG-98	162.55 MHz

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

WOODY ISLAND CHANNEL

Woody Island Channel is subject to continual change. Woody Island Channel Buoys 2, 4, & 5 are not charted because they are frequently shifted and are privately maintained.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.603° southward and 4.463° westward to agree with this chart.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Washington or at the Office of the District Engineer, Corps of Engineers in Seattle, Washington.

Refer to charted regulation section numbers.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

Additional information can be obtained at nauticalcharts.noaa.gov.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

TIDAL INFORMATION

PLACE	(LAT/LONG)	Height referred to datum of soundings (MLLW)		
		Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Harrington Point, WA	(46°16'N/123°39'W)	7.7	7.0	0.9
Cathlamet, WA	(46°12'N/123°23'W)	6.7	6.1	0.6
Settlers Point, OR	(46°10'N/123°41'W)	8.0	7.3	1.0
Wauna, OR	(46°10'N/123°24'W)	6.3	5.9	0.6
Skamokawa, WA	(46°16'N/123°27'W)	6.9	6.5	0.8

NOTE: The diurnal range of the tide during low river stages is 6.9 ft at Three Tree Pt., 6.4 ft at Cathlamet, and 5.5 ft at Eagle Cliff. The range becomes progressively smaller with higher stages of the river.

Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov>.

(Oct 2006)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(1) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.

(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, <http://NauticalCharts.gov>, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, <http://OceanGrafix.com>, or help@OceanGrafix.com.

Mercator Projection

Scale 1:40,000 at Lat 46°12'N

North American Datum of 1983

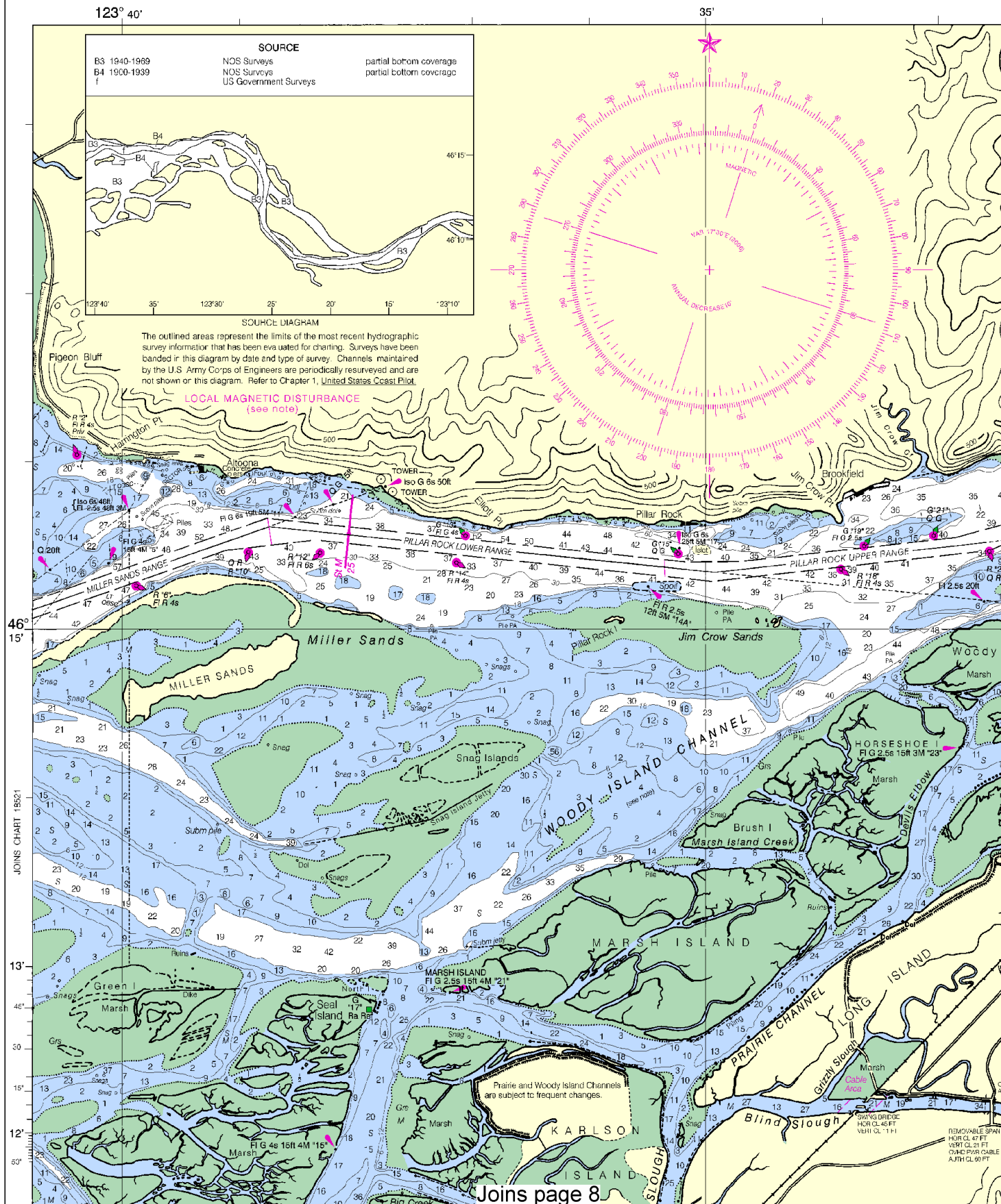
(World Geodetic System 1984)

SOUNDINGS AND CLEARANCES OF BRIDGES
AND OVERHEAD CABLES IN FEET
AT COLUMBIA RIVER DATUM

(MEAN LOWER LOW WATER DURING LOWEST RIVER STAGES)

SOUNDINGS IN FEET

18523

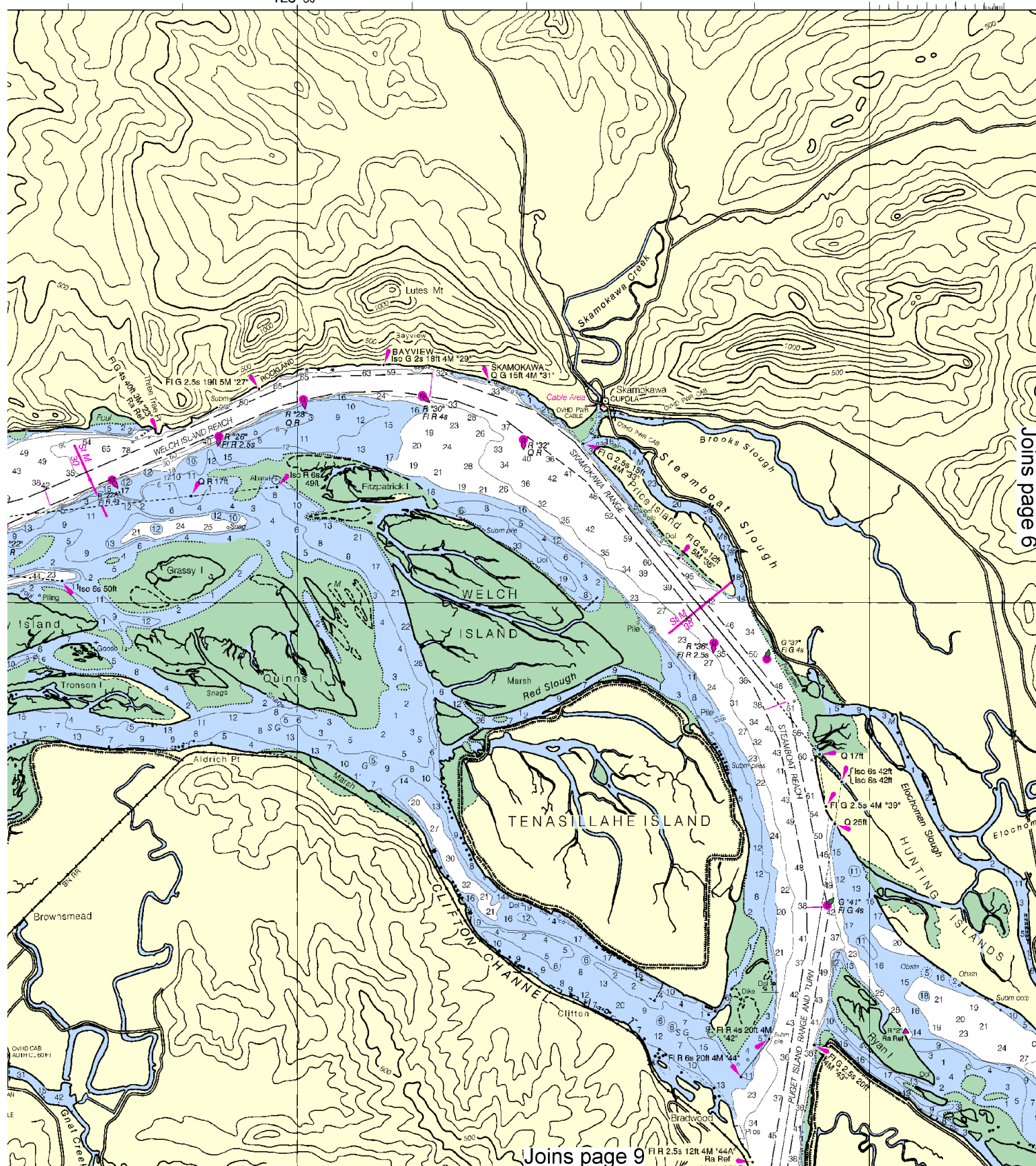


4



123° 30'

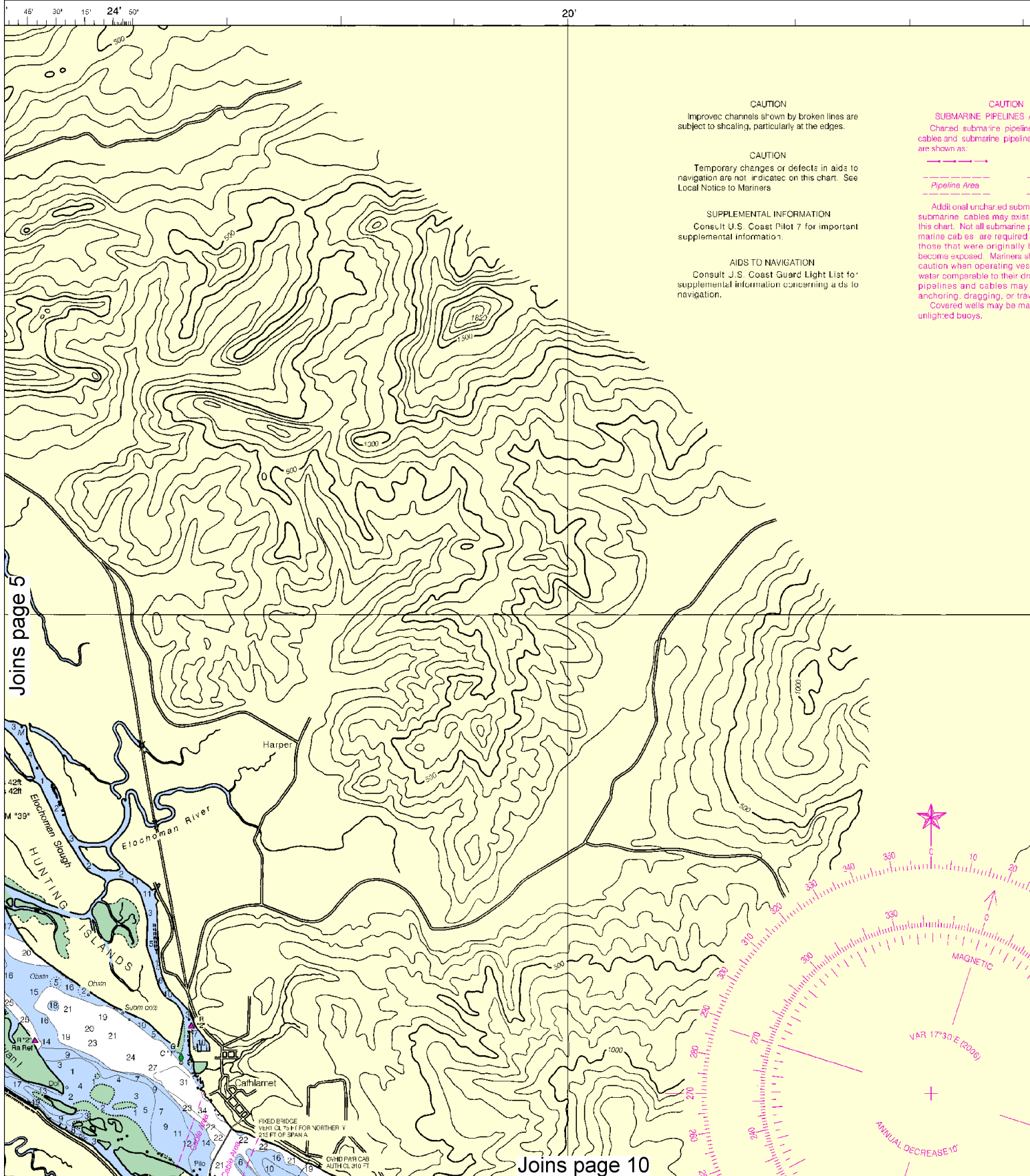
25' 45' 30' 15' 24' 50'

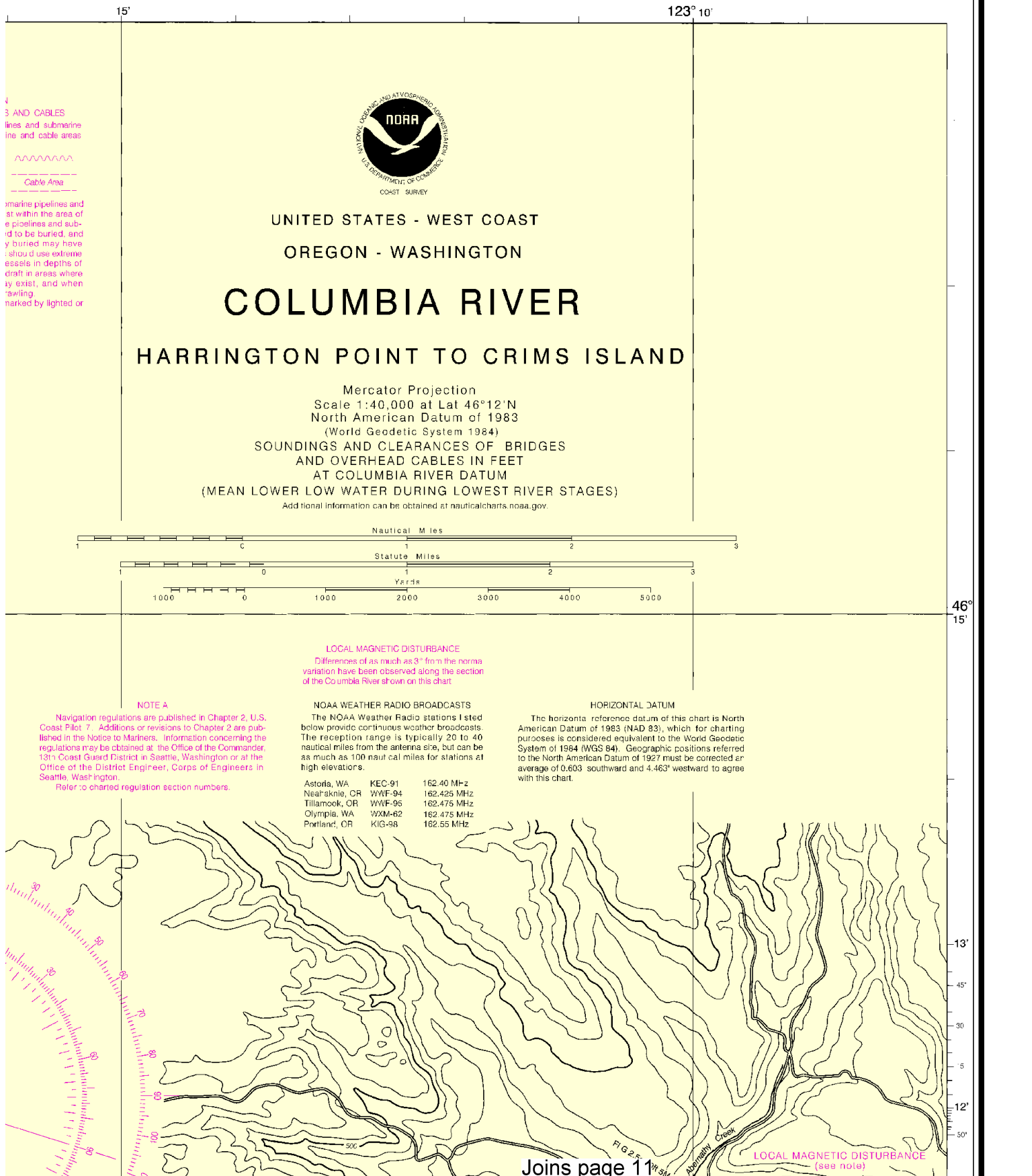


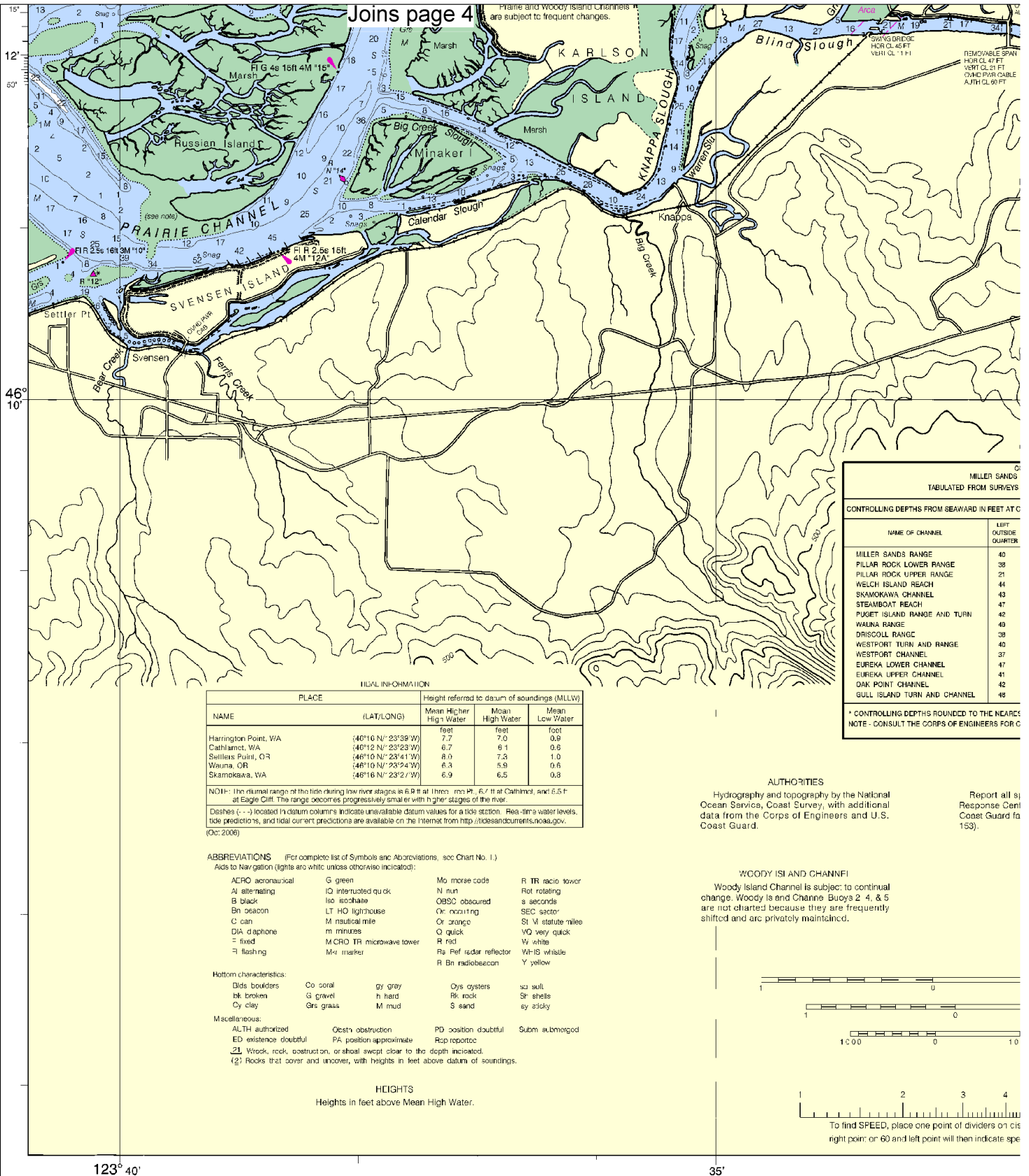
Joins page 6

Joins page 9

This BookletChart was reduced to 70% of the original chart scale.
 The new scale is 1:57143. Barscales have also been reduced and
 are accurate when used to measure distances in this BookletChart.







56th Ed., Oct. / 06
18523

Corrected through NM Oct. 07/06
Corrected through LNM Sep. 26/06

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

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8

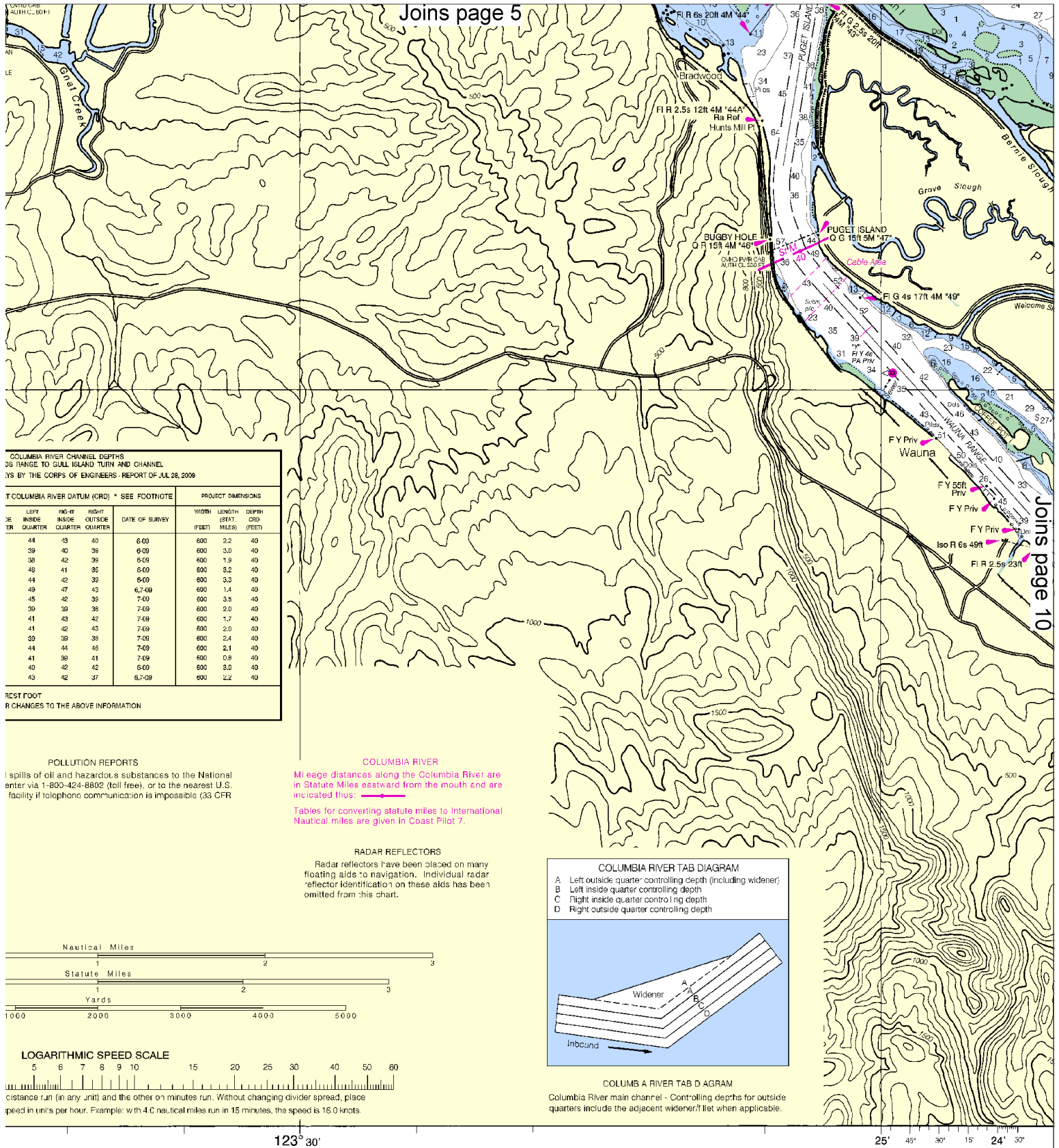


Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.





COLUMBIA RIVER CHANNEL DEPTHS
35 RANGE TO GULL ISLAND TURN AND CHANNEL
BY THE CORPS OF ENGINEERS - REPORT OF JUL 28, 2009

T.COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE				PROJECT DIMENSIONS		
LEFT INSIDE QUARTER	INSIDE INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
44	43	40	6-09	600	2.2	40
39	40	39	6-09	600	3.0	40
38	42	39	6-09	600	1.8	40
46	41	35	6-09	600	3.2	40
44	42	39	6-09	600	3.3	40
49	47	43	6-7-09	600	1.4	40
45	42	39	7-09	600	3.5	40
39	39	38	7-09	600	2.0	40
41	43	42	7-09	600	1.7	40
41	42	43	7-09	600	2.0	40
39	39	38	7-09	600	2.4	40
44	44	46	7-09	600	2.1	40
41	39	41	7-09	600	0.8	40
40	42	42	6-09	600	3.0	40
43	42	37	6-7-09	600	2.2	40

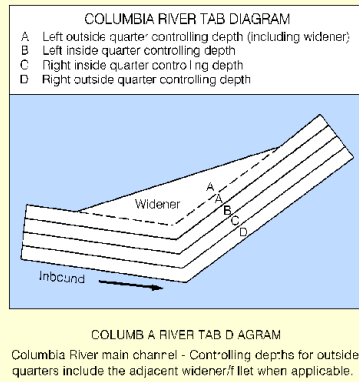
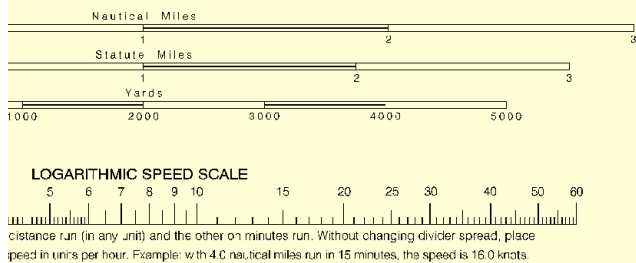
REST FOOT
R CHANGES TO THE ABOVE INFORMATION

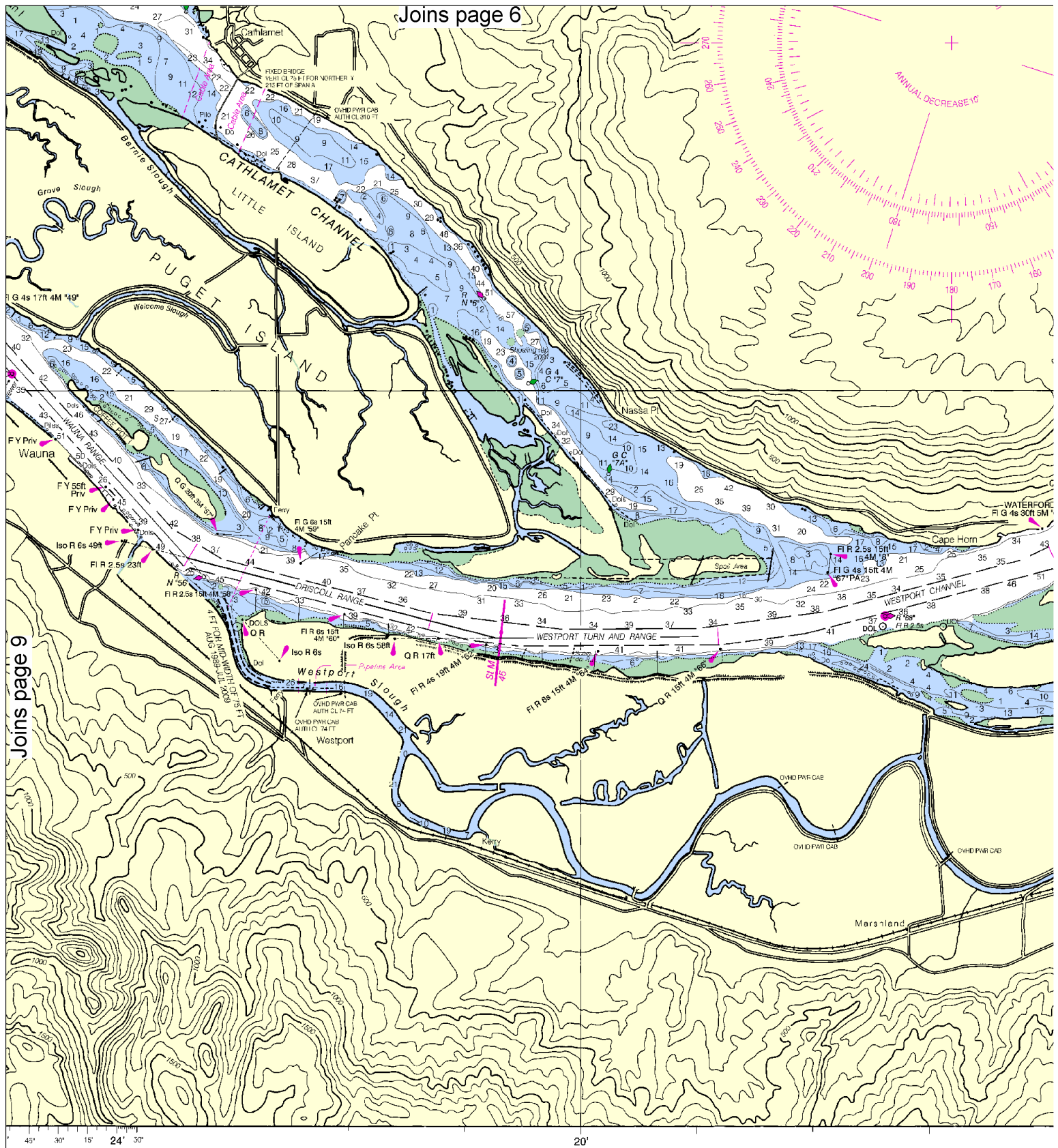
POLLUTION REPORTS
In spills of oil and hazardous substances to the National
enter via 1-800-424-8802 (toll free), or to the nearest U.S.
facility if telephonic communication is impossible (33 CFR

COLUMBIA RIVER
Mileage distances along the Columbia River are
in Statute Miles eastward from the mouth and are
indicated thus: ————

Tables for converting statute miles to International
Nautical miles are given in Coast Pilot 7.

RADAR REFLECTORS
Radar reflectors have been placed on many
floating aids to navigation. Individual radar
reflector identification on these aids has been
omitted from this chart.

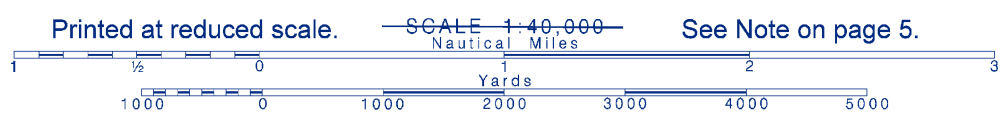




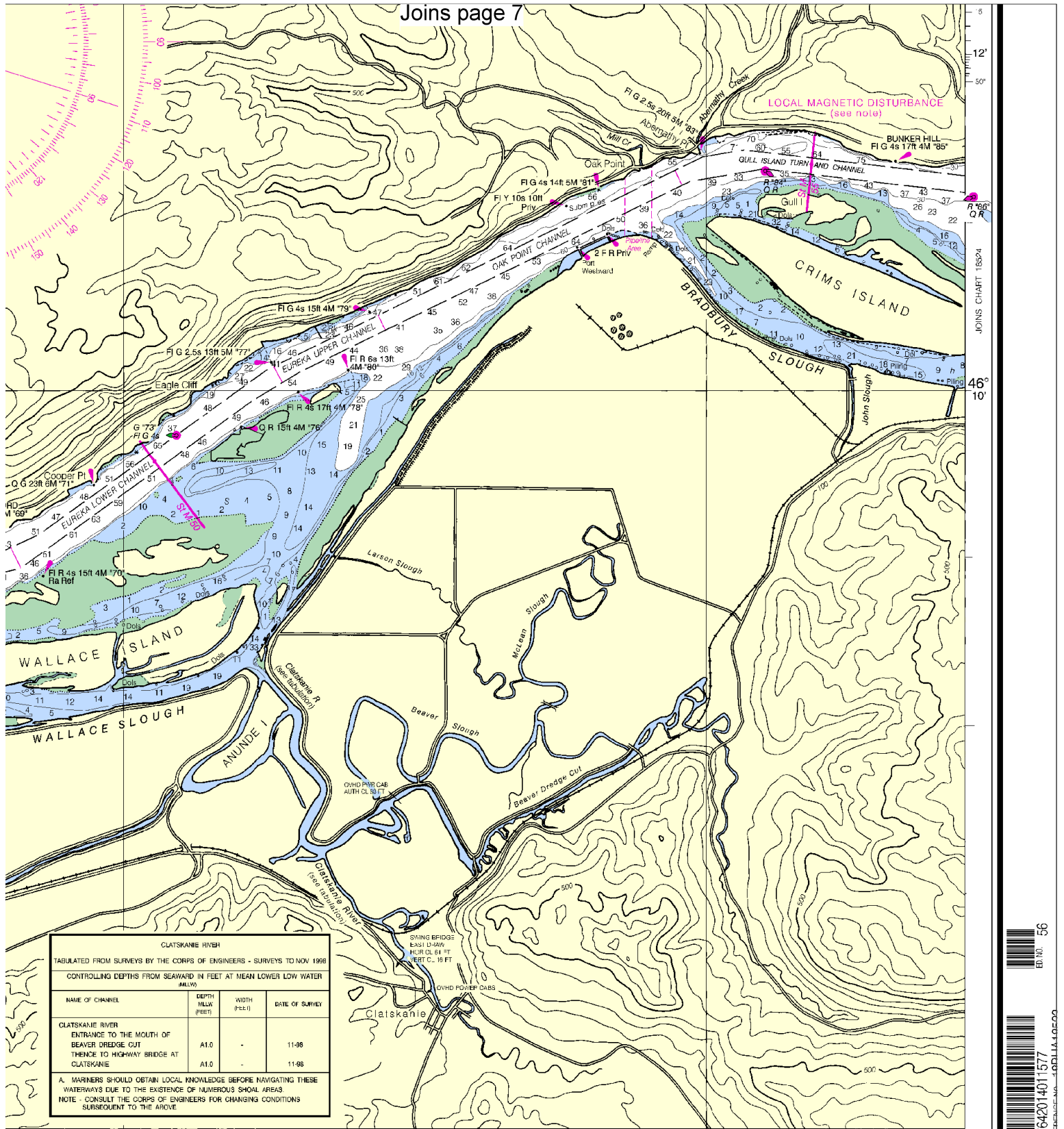
Published at Washington, D.C.
 U.S. DEPARTMENT OF COMMERCE
 OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SERVICE
 COAST SURVEY

SOUNDINGS IN FEET

FATHOMS	1	2	3	4	5	6
FEET	6	12	18	24	30	36
METERS	1	2	3	4	5	6



See Note on page 5.



Columbia River, Harrington Pt. to Crims Island
 SOUNDINGS IN FEET - SCALE 1:40,000

18523

11

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue – 206-220-7001

Coast Guard Astoria – 503-861-6211

Coast Guard Portland – 503-240-9301

Commercial Vessel Assistance – 1-800-367-8222

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENC[®]) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.